

PRIOR KNOWLEDGE

Supervised and unsupervised learning in machine learning:

Supervised machine learning is generally used to classified data or make predictions, whereas unsupervised learning is generally used to understand relationship within Data Sets. Supervised machine learning is much more resource- intensive because of the need for labelled data.

Classification Regression and Clustering:

Regression and classification are Types of supervised learning algorithms while clustering is a unsupervised algorithm. When the output variable is continuous, then it is a regression problem whereas when it contains discrete values, it is a classification problem.

Artificial Neural Network:

Artificial neural networks, usually simply called neural network or neural nets, are computing system inspired by the biological neural networks that constitute animal brains. An ANN is based on a collection of connected units or nodes called artificial neurons, which is loosely models the neurons in a biological brain.

Convolutional Neural Network:

- ❖ A Convolutional Neural Network or CNN, is a deep learning neural network sketched for processing structured arrays of data such as portrayals.
- ❖ CNN are very satisfactory at picking up On design in the input image.
- ❖ This characteristic that makes Convolutional Neural Network so robust for computer vision.

Flask:

- ❖ Flask is lightweight python web framework that provides useful tools and features for creating web application in the python language.
- ❖ Flask is a micro web framework written in python. It is classified as a micro framework because it doesn't require particular tools or libraries.
- ❖ It has no database abstraction layer, form validation, or any other components where pre- existing, third- party libraries provide common functions.